

Is LG Display a deep value play or cheap for a reason?





**Valuation Master Class** 

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# Is LG Display a deep value play or cheap for a reason?





**Sector: Info Tech** 



Among the world's largest manufacturers of displays for TV, mobile phones, and computers with a market share of 21%

# My value estimate:

KRW21,067

**(Upside 7%)** 

**HOLD** 



## 3 things to know about this company

- Intensified price competition leads to loss of market share
- End markets for displays face maturity, expect low growth
- Focus on premium products to turnaround margin

# **Key statistics**

Analyst consensus (32)

PE ratio

Dividend yield

KRW26,000

**5**x

0%

(Upside 32%)

**BUY** 

# **Revenue breakdown 2020**



# Sales

Story

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Value

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Risks

# IT products 42%





Mobile 30%

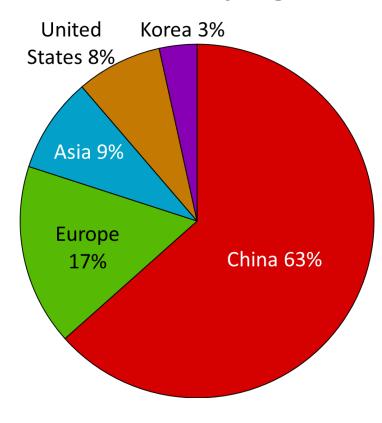


Sources: A. Stotz Investment Research, company data

**Television 28%** 

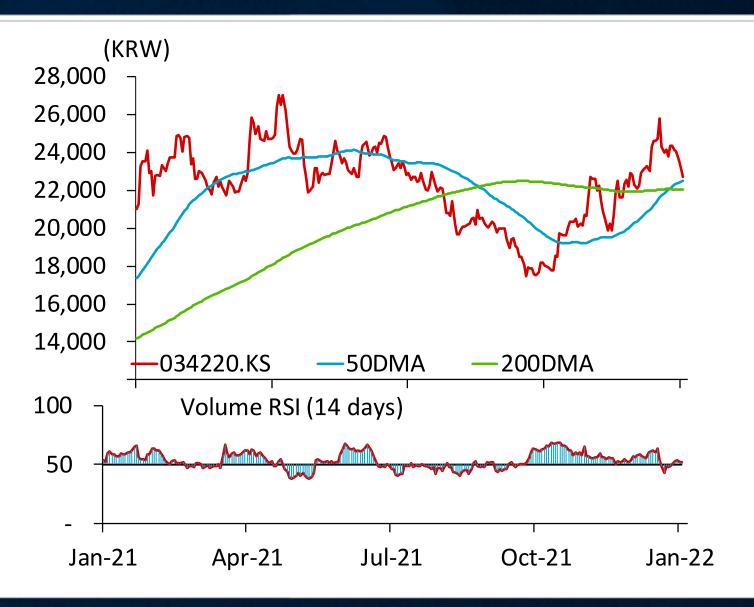


# Breakdown by region



# Price recently turned bullish, but low volume support



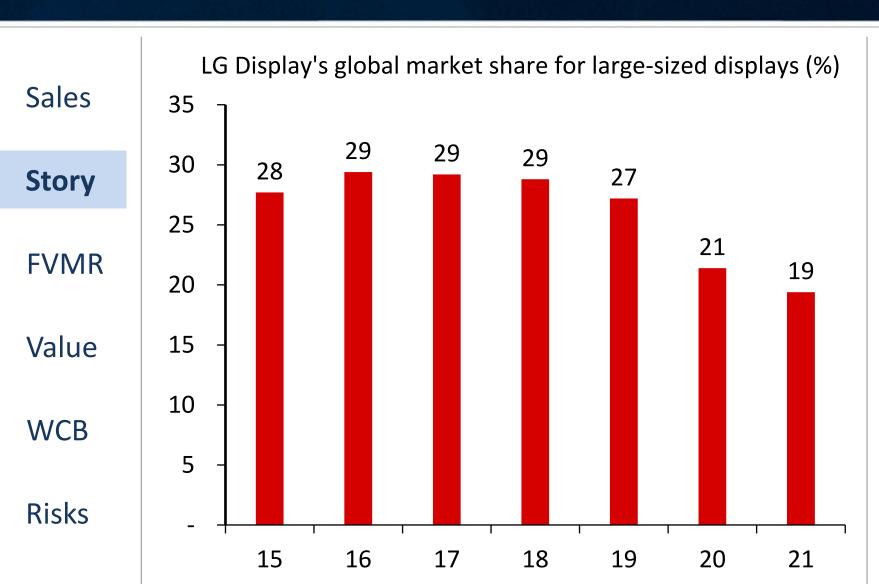


- In early 2022, the 50DMA has crossed the 200DMA, which is a positive signal
  - However, the share price seems to cross the 50DMA soon, which could turnaround the trend
- ★ Volume RSI has been strong in 4Q21
  - Recently, it moved to the 50%line, providing no clear signal going forward



# Intensified price competition leads to loss of market share

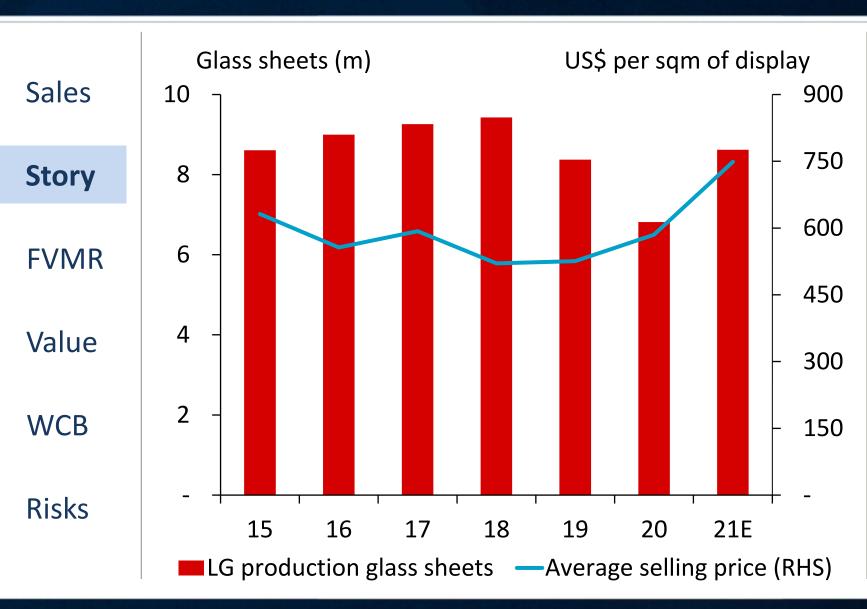




- The display industry is dominated by Asian manufacturers from China, Taiwan, Korea, and Japan
- Chinese companies aggressively expanded their capacity to produce displays at lower prices
  - The Chinese gov't continues to subsidize its domestic companies which could even lead to a potential oversupply soon

# Supply shortages drive up selling price, but only temporary

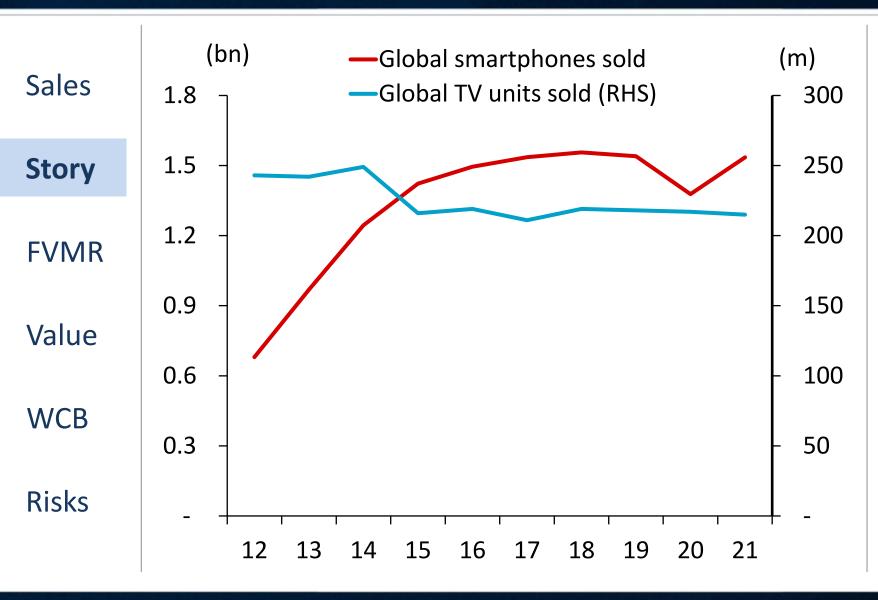




- In 2019, the average selling price for LG's displays per sqm dropped by 17% compared to 2015
  - Mainly to keep up with cheaper products from its competitors
- During the pandemic, the price for displays spiked in response to excessive demand and supply shortages
  - I believe this trend to be short-lived and expect falling prices again

# End markets for displays face maturity, expect low growth

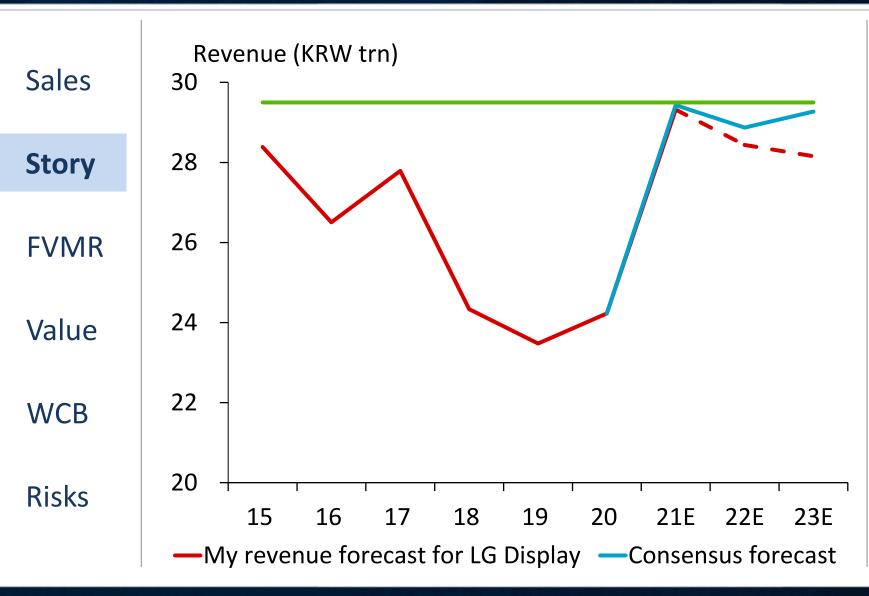




- LG Display's revenue is mainly dependent on the growth of its end markets such as computer, phones, and TV
- A mature market for smartphones translates into low demand for displays
  - The same goes for TV which saw declining trend over the past years

# End markets for displays face maturity, expect low growth



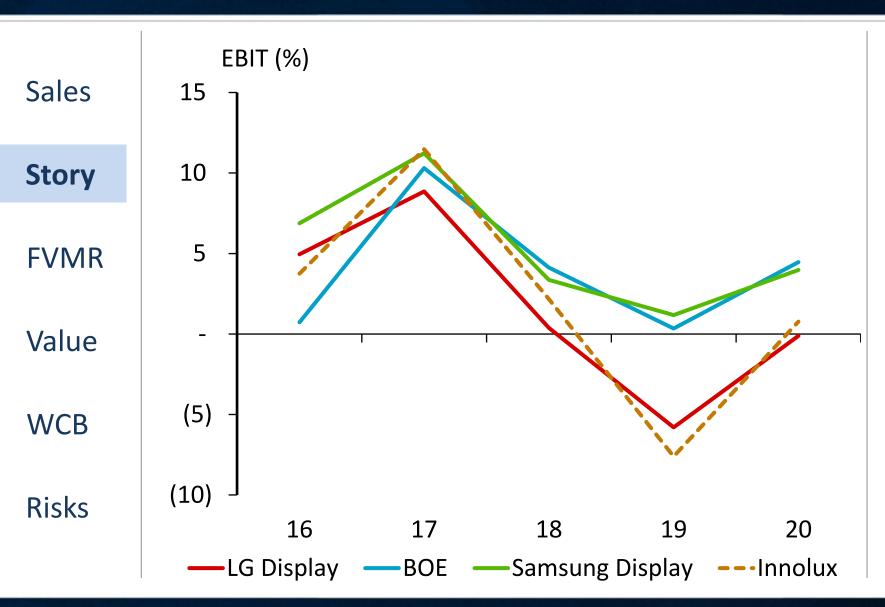


- In the past, LG Display has been in a downward spiral
  - Between 2015 and 2020, revenue declined by more than 15%
- Despite a jump in 21E revenue, the company faces a challenge to hit the KRW30trn revenue mark over time
  - I expect declining revenue in the following 2 years



# Focus on premium products to turnaround margin





Sources: A. Stotz Investment Research, company data

- Currently there are two major technologies prevailing in the display market
  - The first one, LCD, existed since the early 2000s
  - Chinese competitors started to compete on price for LCD TVs, leading to a severe drop in selling price
  - The other TV tech, OLED, is supposed to deliver a better picture quality, but is more expensive

# Focus on premium products to turnaround margin



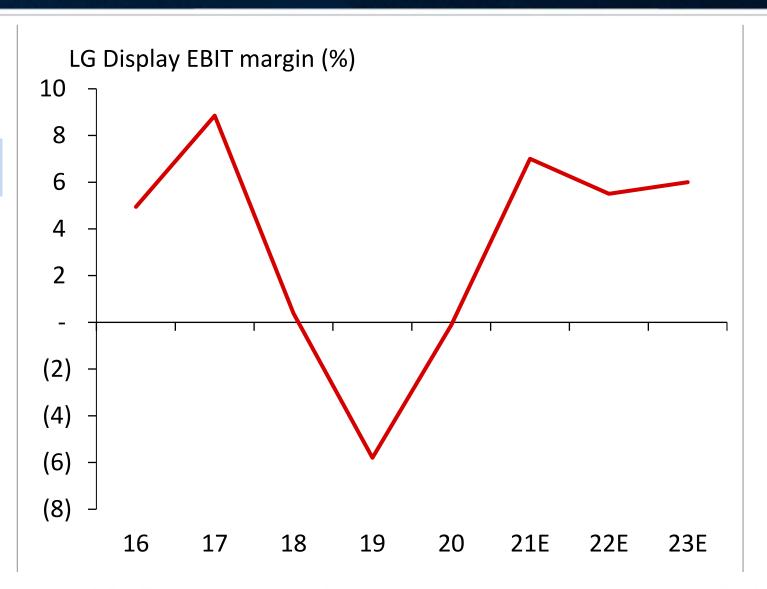


# **Story**

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- ★ LG Display realigned its strategy to transition to highmargin OLED rather than responding to the price competition on LCD TVs
  - Currently, only Samsung has emerged as a serious competitor in OLEDs
  - This means that OLED TVs can maintain a price premium for some time
- ★ The strategy should help to stabilize LG's margin and turnaround losses



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# FVMR Scorecard

- Measures a stock's
   attractiveness relative to all
   other companies
- \* Attractiveness is based on four elements
  - Fundamentals, Valuation,
     Momentum, and Risk
- \*Scale from 1 (Best) to 10 (Worst)



# Strong momentum and favorable valuation



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Risks



Risk

<u>(%)</u>	Dec-17	Dec-18	Dec-19	Dec-20	PTM**
Operating profit margin	9.1	0.4	(5.7)	(0.8)	8.7
Recurring net margin	7.0	(0.3)	(4.1)	0.0	6.2
Asset turnover	102.8	78.1	68.3	68.6	78.1
Return on assets	7.2	(0.2)	(2.8)	0.0	4.8
Recurring return on equity	14.3	(0.4)	(7.5)	0.0	14.7

(x)	Dec-17	Dec-18	Dec-19	Dec-20	PTM**
Price-to-sales	0.3	0.3	0.2	0.3	0.3
Price-to-earnings	4.8	nm	nm	21,882.5	4.7
Price-to-book	0.7	0.5	0.4	0.7	0.6
PE-to-EPS growth (PEG)	0.0	nm	nm	nm	nm
EV/EBIT	4.8	130.7	nm	nm	7.0

w

Momentum	w							В		
0()	D 47	_	40	_	40	_	_	DTA 4	**	

(x)	Dec-17	Dec-18	Dec-19	Dec-20
Current ratio	1.2	0.9	0.9	1.0
Net debt-to-equity (%)	20.3	50.8	100.3	98.8
Times-interest-earned	18.4	0.5	(2.9)	(0.4)
	5yr	3yr	1yr	6mth
Beta	1.2	1.3	1.3	1.4

(%)	Dec-17	Dec-18	Dec-19	Dec-20	PTM**
Revenue growth	4.9	(12.4)	(3.5)	3.2	23.0
Recurring EPS growth	124.5	(103.3)	(1,396.2)	100.0	325.5
Operating profit margin chg. (bps)	461	(869)	(612)	486	1,406
	6mth	3mth	1mth	3wk	1wk
Price change	(11.7)	(1.2)	1.7	2.7	(0.7)

Note: Benchmarking against 770 non-financial companies in South Korea.

PTM\*\*

1.0

77.1

4.8 3mth

0.9

Recently, I created a short online course explaining my FVMR investing approach

I usually sell it for \$97 but for a limited time I am offering it for FREE





# Consensus sees a cheap opportunity to buy



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Analyst consensus valuation								
Recommendation	Oct-21	Nov-21	Dec-21	Current				
Strong buy	7	7	7	8				
Buy	13	13	13	15				
Hold	6	6	4	4				
Sell	5	5	6	5				
Strong sell	-	-	-	-				
Average score	2.3	2.3	2.3	2.2				

Price target	Oct-21	Nov-21	Dec-21	Current
Median	25,000	25,000	25,000	26,000
Mean	25,100	23,435	23,983	25,467

32 analysts



Upside: 32%

- Most analysts have issued a BUY recommendations, while 5 analysts recommend a SELL
- ★ Consensus expects a strong revenue boost in 21E, but flat revenue afterward
  - They expect the company to turn around its losses and achieve a higher level of margin

Analyst consensu	us 3-year fo	orecast				
(%)	18	19	20	<b>21</b> E	22E	23E
Revenue growth	2.5	(3.5)	3.2	21.5	(1.9)	1.4
Gross margin	12.7	8.0	10.9	18.1	16.2	17.3
EBIT margin	0.4	(5.8)	(0.1)	8.1	5.7	6.5
Net margin	(0.9)	(12.1)	(0.4)	4.9	3.4	4.1

# **Profit & loss statement**



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(YE Dec, Won bn)	<b>2019A</b>	2020A	<b>2021E</b>	2022E
Revenue	23,476	24,230	29,318	28,439
Cost of goods & services	(21,607)	(21,588)	(24,129)	(23,889)
Gross profit	1,868	2,643	5,189	4,550
SG&A	(3,229)	(2,672)	(2,990)	(2,986)
Other operating (exp)/inc	0	-	-	-
EBIT	(1,361)	(29)	2,199	1,564
Interest expense (net)	(119)	(301)	(178)	(183)
Other non-operating inc/(exp)	(1)	10	12	14
Earnings before taxes (EBT)	(1,481)	(320)	2,033	1,395
Income tax	472	524	(468)	(321)
Earnings after taxes (EAT)	(1,009)	204	1,565	1,074
Equity income/Minority interest	55	(6)	(145)	(101)
Earnings from cont. operations	(955)	198	1,420	973
Forex/Exceptionals before tax	(1.875)	(288)	-	-
Net profit	(2,830)	(89)	1,420	973

- The company is likely to benefit from supply shortages and excessive demand in 21E
  - The average display selling price per sqm has reached its highest level ever
  - I consider this effect only temporary

# **Balance sheet - assets**



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**Risks** 

(YE Dec, Won bn)	<b>2019A</b>	2020A	2021E	2022E
Cash & short-term investments	3,338	4,220	3,518	3,413
Accounts receivable	3,628	3,662	4,398	4,266
Inventories	2,051	2,171	2,949	2,920
Other current assets	1,232	1,047	1,613	1,564
Total current assets	10,248	11,099	12,478	12,162
Long-term investments	110	115	127	135
Net fixed assets	22,088	20,147	20,749	21,695
Intangible assets	826	975	947	1,031
Goodwill	47	46	48	50
Other long-term assets	2,256	2,690	3,136	3,262
Total assets	35,575	35,072	37,486	38,335

Contrary to its Chinese competitors, I don't expect LG Display to pursue an aggressive expansion plan

# **Balance sheet - liabilities**



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Risks

(YE Dec, Won bn)	2019A	2020A	2021E	2022E
Overdrafts & short-term loans	1,977	3,136	4,958	4,874
Accounts payable	3,294	4,431	5,228	4,977
Other current liabilities	5,714	3,440	3,225	3,128
Total current liabilities	10 <sub>,</sub> 985	11,007	13,411	12,979
Long-term debt	11,592	11,016	9,355	9,542
Other long-term liabilities	509	312	405	417
Total liabilities	23,086	22,335	23,171	22,938
Minority interest	1,148	1,336	1,494	1,602
Paid-up capital - Common shares	4,040	4,040	4,040	4,040
Paid-up capital - Preferred shares	-	-	-	-
Retained earnings	7,503	7,524	8,944	9,918
Revaluation/Forex/Others	(203)	(163)	(163)	(163)
Total equity	11,340	11,401	12,821	13,794
Total liab & shareholders' equity	35,575	35,072	37,486	38,335

The company started to reduce its long-term debt in 21E



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(YE Dec)	<b>2019A</b>	2020A	<b>2021E</b>	<b>2022E</b>
General growth (YoY, %)				
Revenue	(3.5)	3.2	21.0	(3.0)
Assets	7.2	(1.4)	6.9	2.3
Gross profit	(39.4)	41.4	96.4	(12.3)
Operating profit	nm	97.9	nm	(28.9)
Attributable profit	nm	96.8	nm	(31.4)
EPS	nm	96.8	nm	(31.4)
Recurring EPS	nm	120.8	616.1	(31.4)
Du Pont analysis (%)				
Net profit margin	(12.1)	(0.4)	4.8	3.4
Revenue per Won100 of assets	68.3	68.6	80.8	75.0
Assets/equity (x)	2.7	3.1	3.0	2.8
Return on equity	(22.4)	(0.8)	11.7	7.3

- The company is characterized by rather weak efficiency
  - This means that the company needs to increase investments to drive revenue growth

# Ratios (cont.)



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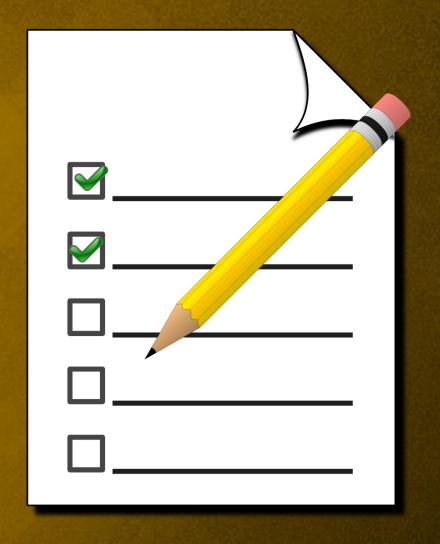
(YE Dec)	2019A	2020A	2021E	2022E
Internal liquidity (x)				
Current ratio	0.9	1.0	0.9	0.9
Quick, or acid test ratio	0.7	0.8	0.7	0.7
Working cap. mgmt (Days)				
Inventory conversion period	40	35	38	44
Receivables collection period	51	54	49	55
Days from raw mat to coll	90	89	88	99
Payables deferral period	58	64	72	77
Cash conversion cycle	32	25	16	22
Profitability ratios (%)				
Gross profit margin	8.0	10.9	17.7	16.0
EBIT margin	(5.8)	(0.1)	7.5	5.5
EBIT return on avg assets	(4.0)	(0.1)	6.1	4.1
Return on average assets	(8.2)	(0.3)	3.9	2.6
Financial risk (x)				
Liabilities-to-assets (%)	64.9	63.7	61.8	59.8
Debt-to-equity	1.2	1.2	1.1	1.0
Net debt-to-equity	0.9	0.9	0.8	0.8
Times-interest-earned	13.5	11.1	26.4	23.2
Effective interest rate (%)	1.6	2.7	1.8	2.0

- ★ With the increased focus on producing higher-margin displays to escape the price competition on LCD TVs, I expect the company to maintain a higher margin over time
  - However, the competitive advantage is likely to diminish over time which is also incorporated in my forecast

A. Stotz Investment Research
Stock Picking Checklist

\*Inspired by Peter Lynch's ten baggers (A stock that has gone up 10x)

- \* Based on our extensive research
- \* 9 factors that drive long-term share price performance



# Long-term share price performance potential



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A. Stotz Investment Research		G	ood
Stock Picking Checklist	Potential	Comment	
<ol> <li>Management – Management has a proven commitment to growth</li> </ol>	Weak	In the past, the management has reduced product capacity, leading to a declining revenue trend	ction
2. Growth – Product and industry can support a decade of 10%+ annual growth	Weak	End markets for displays are mature 9e.g. smartphones, TV)	
3. Sustainable – Competitive strategy creates sustainably high gross margin	Weak	Competition in Asia is intense and Chinese gov't supports its domestic companies	
<b>4. Quality</b> – Good earnings quality, noncore items are small or non-existent	Weak	High fluctuations; EBIT has been negative in the p 2 years	oast
<b>5. Efficiency</b> – In the long run sales grow faster than assets	Weak	The company is characterized by a low efficiency; asset turnover is less than 100%	,
<b>5. Tight</b> – Relatively low cash conversion cycle, negative is best	Moderate	Cash conversion is moderately high and stood at 2 days in 2020	25
7. Cash flow – Operating cash flow is consistently positive	Moderate	Operating cash flows fluctuated a lot and were sometimes not enough to cover investing outflow	vs
8. Capacity – Company has access to capital to fund growth	Moderate	The company is relatively high levered (net debt-t equity ratio stood at 0.9x in 2020	to-
<b>9. Inexpensive</b> – Valuation is reasonable, avoid very expensive stocks	Good	Massive discount on both 21E PE and PB compare to Korean Info Tech companies, but low on ROE	ed

# Free cash flow



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**Risks** 

(YE Dec, Won bn)	<b>2019A</b>	2020A	<b>2021E</b>	<b>2022E</b>
EBIT	(1,361)	(29)	2,199	1,564
Est tax rate (%)	-	-	23	23
NOPAT	(1,361)	(29)	1,693	1,204
Add: Depre & amort	3,695	4,135	4,728	5,135
Less: CAPEX	(6,510)	(2,157)	(4,761)	(5,447)
Chg in A/R	(630)	(34)	(736)	132
Chg in inventory	640	(120)	(778)	29
Chg in oth curr assets	(491)	185	(566)	48
Chg in A/P	(427)	1,138	797	(251)
Chg in oth curr liabs	1,035	(2,275)	(215)	(97)
Less: Chg in working cap	127	(1,106)	(1,498)	(138)
Less: Chg in invest cap				
Free cash flow to firm	(4,049)	843	163	754

★ FCFF in 21E was dragged down by massive changes in net working capital, but should stay positive

# **Value estimate**



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Forecast assumptions			
3-year average	Consensus	My assur	nptions
Revenue growth (CAGR)	6.5		5.1
Gross margin	17.2		16.7
EBIT margin	6.8		6.3
Net margin	4.1		4.0

My valuation method		
Market: Korea		
Market risk-free rate	2.6	
Market equity risk premium	8.0	
Market return	10.6	Malaratian Boatlaad
Company beta (x)	1.3	Valuation Method:
COE	12.6	FCFF
WACC	6.5	
Terminal growth rate	2.0	

- I expect a lower revenue growth than consensus as I assume the temporary pricedriven revenue boost to not last much longer
  - Quantity sold has been on a declining trend before the pandemic and might continue going forward
- ★ A reasonable terminal growth rate of 2%

# **Value estimate**



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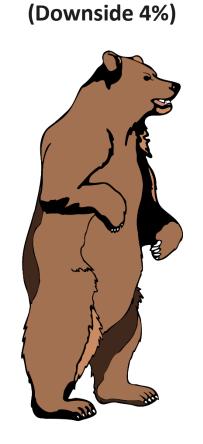
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Bear KRW18,853



Base KRW21,067 **(Upside 7%)** 



Bull KRW23,274

(Upside 18%)



World Class Benchmarking Scorecard

- We identify a company's competitive position relative to global peers
- \* We use a composite rank of profitability and growth, called "Profitable Growth"
- Scale from 1 (Best) to 10 (Worst)



# Poor profitability partly offset by strong growth rebound



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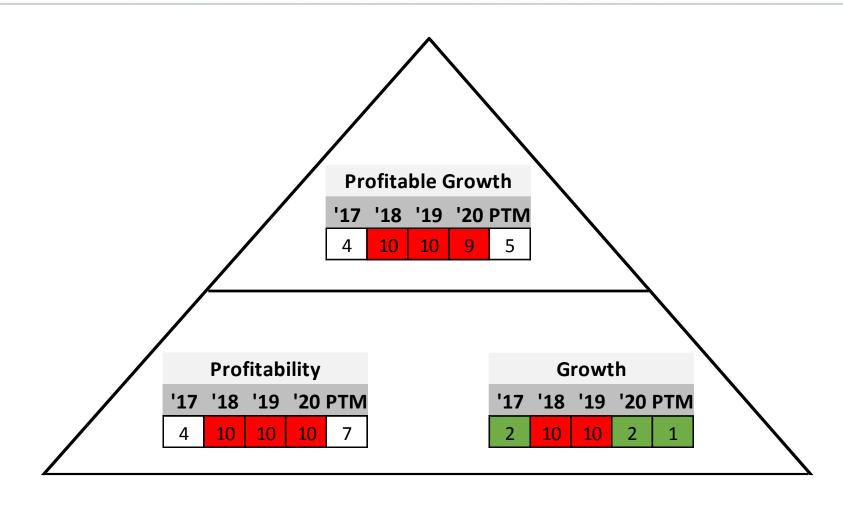
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Benchmarked against 700 large Info Tech companies worldwide.

# Key risk is intensified price competition



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- ★ Failure to keep up with latest technology to maintain competitive advantage
- ★ High concentration of key customers
- ★ Fluctuations in demand as end markets are sensitive to market conditions

# CONCLUSION

- Markets for displays is mature;
   expect flat or declining revenue
- Focus on OLED technology could bring sustainable higher margin
- Valuation is cheap; but probably for good reasons

